

What is claimed is:

1. A current mirror circuit, which has a plurality of output transistors serving as current mirror outputs, comprising:

5 a first input transistor whose one end is connected to a first constant current source and whose another end is connected to a first connecting position at a first potential, which is used as an input side of a current mirror;

10 a second input transistor whose one end is connected to a second constant current source, which is disposed with being separated from said first input transistor by a predetermined distance and is used as an input side of a current mirror;

15 a first feeder line which connects said other end of said first input transistor with another end of said second input transistor;

20 a first potential line which connects said one end of said first input transistor with said one end of said second input transistor with a resistance that is higher than a resistance of said first feeder line, to produce a potential gradient; and

a plurality of output transistors distributed between said first input transistor and said second input

transistor, which are coupled to said first feeder line and said first potential line and are used as an output side of a current mirror.

5 2. The current mirror circuit according to claim 1, further comprising:

a third input transistor whose one end is connected to a third constant current source, which is disposed with being separated from said second input transistor by a  
10 predetermined distance in an opposite direction to said first input transistor and is used as an input of a current mirror;

a second feeder line which connects said other end of said second input transistor with another end of said third  
15 input transistor;

a second potential line which connects said one end of said second input transistor with said one end of said third input transistor with a resistance that is higher than a resistance of said second feeder line, to produce a  
20 potential gradient; and

a plurality of output transistors distributed between said second input transistor and said third input transistor, which are coupled to said second feeder line and said second potential line and is used as an output  
25 side of a current mirror.

3. The current mirror circuit according to claim 2,  
wherein said another end of said third input transistor is  
connected to a second connecting position at the first  
5 potential.

4. The current mirror circuit according to claim 1,  
wherein said first potential line is polysilicon line.

10 5. The current mirror circuit according to claim 2,  
wherein said second first potential line is polysilicon  
line.

6. The current mirror circuit according to claim 1,  
15 wherein said first and second input transistors and said  
output transistors are P-channel MOS transistors.

7. The current mirror circuit according to claim 2,  
wherein said third input transistor is P-channel MOS  
20 transistor.

8. The current mirror circuit according to claim 1,  
wherein said first and second input transistors and said  
output transistors are N-channel MOS transistors.

25

9. The current mirror circuit according to claim 2, wherein said third input transistor is N-channel MOS transistor.